

WHAT IS CLAIMED IS:

1. A hardenable flowable substance for application to a patch surface surrounded by an acoustic ceiling material having an irregular surface texture to form a layer of textured patch material on the patch surface, wherein the hardenable flowable substance is storable in a fluid-tight dispensing container and sprayable utilizing a volatile organic compound (VOC) propellant, the hardenable flowable substance comprising:

a liquid base;

a filler selected to form an extender or bodifier for the resulting patch material;

an adhesive binder selected to adhere the resulting patch material to the surface;

an aggregate comprising rubber particulates that does not decompose in the presence of VOC propellants, selected to give the resulting patch material an irregular surface texture;

an anti-foaming agent; and

a suspension agent,

wherein the hardenable flowable substance is initially stored in fluid state and is dispensable in the form of an aerosol spray from the fluid-tight container and, after being released and curing, forms a bumpy, irregular surface texture that matches and is compatible with the acoustic ceiling material surrounding the patch.

2. The hardenable flowable substance according to claim 1, having the following composition by percentage weight:

the liquid base of 20-70%;

the filler of 40-80%;

the adhesive binder of 1-50%;
the propellant of 5-20%;
the aggregate of 2-40%;
the anti-foaming agent of 1-10%; and
the suspension agent of 1-20%.

3. The hardenable flowable substance according to claim 2, wherein:
the liquid base consists essentially of water;
the filler consists essentially of a mixture of calcium carbonate and mica;
the adhesive binder consists essentially of polyvinyl alcohol;
the propellant consists essentially of dimethyl ether;
the rubber particulates of the aggregate are open-cell;
the anti-foaming agent consists essentially of Wichenol; and
the suspension agent consists essentially of carbonal.

4. The hardenable flowable substance according to claim 2, wherein:
the liquid base consists essentially of a solvent;
the filler consists essentially of a mixture of calcium carbonate and mica;
the adhesive binder consists essentially of polyvinyl alcohol;
the propellant consists essentially of dimethyl ether;
the rubber particulates of the aggregate are open-cell;
the anti-foaming agent consists essentially of Wichenol; and
the suspension agent consists essentially of carbonal.

5. The hardenable flowable substance according to claim 1, further comprising:
a fungicide.
6. The hardenable flowable substance according to claim 1, further comprising:
an anti-freeze.
7. The hardenable flowable substance according to claim 6, wherein the anti-freeze
consists essentially of ethylene glycol.
8. The hardenable flowable substance according to claim 5, wherein the fungicide
has a composition by percentage weight of 0.05-5%.
9. The hardenable flowable substance according to claim 6, wherein the anti-freeze
has a composition by percentage weight of 1-10%.
10. A system for dispensing a hardenable flowable substance sprayable utilizing a
volatile organic compound (VOC) propellant for application to a patch surface surrounded by an
acoustic ceiling material having an irregular surface texture to form a layer of textured patch
material on the patch surface, the system comprising:
a fluid-tight container, in which the hardenable flowable substance is stored; and
an actuator on the fluid-tight container for selectively releasing the hardenable
flowable substance in the form of an aerosol spray,
wherein said hardenable flowable substance comprises,

a liquid base,
a filler selected to form an extender or bodifier for the resulting patch material,
an adhesive binder selected to adhere the resulting patch material to the surface,
an aggregate comprising rubber particulates that does not decompose in the presence of VOC propellants, selected to give the resulting patch material an irregular surface texture,
an anti-foaming agent, and
a suspension agent,
wherein the hardenable flowable substance forms a bumpy, irregular surface texture that matches and is compatible with the acoustic ceiling material surrounding the patch.

11. The system for dispensing the hardenable flowable substance according to claim 10, wherein the hardenable flowable substance has the following composition by percentage weight:

the liquid base of 20-70%;
the filler of 40-80%;
the adhesive binder of 1-50%;
the propellant of 5-20%;
the aggregate of 2-40%;
the anti-foaming agent of 1-10%; and

the suspension agent of 1-20%.

12. The system for dispensing the hardenable flowable substance according to claim 11, wherein:

the liquid base consists essentially of water;
the filler consists essentially of a mixture of limestone and clay;
the adhesive binder consists essentially of polyvinyl alcohol;
the propellant consists essentially of dimethyl ether;
the rubber particulates of the aggregate are open-cell;
the anti-foaming agent consists essentially of Wichenol; and
the suspension agent consists essentially of carbonal.

13. The system for dispensing the hardenable flowable substance according to claim 11, wherein:

the liquid base consists essentially of a solvent;
the filler consists essentially of a mixture of limestone and clay;
the adhesive binder consists essentially of polyvinyl alcohol;
the propellant consists essentially of dimethyl ether;
the rubber particulates of the aggregate are open-cell;
the anti-foaming agent consists essentially of Wichenol; and
the suspension agent consists essentially of carbonal.

14. The system for dispensing the hardenable flowable substance according to claim 10, the hardenable flowable substance further comprising:

a fungicide.

15. The system for dispensing the hardenable flowable substance according to claim 10, the hardenable flowable substance further comprising:

an anti-freeze.

16. The system for dispensing the hardenable flowable substance according to claim 15, wherein the anti-freeze consists essentially of ethylene glycol.

17. The system for dispensing the hardenable flowable substance according to claim 14, wherein the fungicide has a composition by percentage weight of 0.05-5%.

18. The system for dispensing the hardenable flowable substance according to claim 15, wherein the anti-freeze has a composition by percentage weight of 1-10%.

19. A method of repairing an acoustic ceiling material, the method comprising:
storing a hardenable flowable substance utilizing a volatile organic compound (VOC) propellant for application to a patch surface surrounded by an acoustic ceiling material having an irregular surface texture in a fluid-tight dispensing container, the hardenable flowable substance comprising,

a liquid base,

a filler selected to form an extender or bodifier for the resulting patch material,

an adhesive binder selected to adhere the resulting patch material to the surface,

an aggregate comprising rubber particulates that does not decompose in the presence of VOC propellants, selected to give the resulting patch material an irregular surface texture,

an anti-foaming agent, and

a suspension agent,

wherein the fluid-tight container has an actuator for selectively dispensing the hardenable flowable substance in the form of an aerosol spray; and

dispensing selectively the hardenable flowable substance onto the patch surface such that the hardenable flowable substance forms a layer having a bumpy, irregular surface texture after being dispensed and curing which matches and is compatible with the acoustic ceiling material surrounding the patch.

20. The method of repairing an acoustic ceiling material according to claim 19, wherein the hardenable flowable substance has the following composition by percentage weight:

the liquid base of 20-70%;

the filler of 40-80%;

the adhesive binder of 1-50%;

the propellant of 5-20%;

the aggregate of 2-40%;

the anti-foaming agent of 1-10%; and

the suspension agent of 1-20%.

21. The method of repairing an acoustic ceiling material according to claim 20,
wherein:

the liquid base consists essentially of water;

the filler consists essentially of a mixture of limestone and clay;

the adhesive binder consists essentially of polyvinyl alcohol;

the propellant consists essentially of dimethyl ether;

the rubber particulates of the aggregate are open-cell;

the anti-foaming agent consists essentially of Wichenol; and

the suspension agent consists essentially of carbonal.

22. The method of repairing an acoustic ceiling material according to claim 20,
wherein:

the liquid base consists essentially of a solvent;

the filler consists essentially of a mixture of limestone and clay;

the adhesive binder consists essentially of polyvinyl alcohol;

the propellant consists essentially of dimethyl ether;

the rubber particulates of the aggregate are open-cell;

the anti-foaming agent consists essentially of Wichenol; and

the suspension agent consists essentially of carbonal.

23. The method of repairing an acoustic ceiling material according to claim 19, the hardenable flowable substance further comprising:

a fungicide.

24. The method of repairing an acoustic ceiling material according to claim 19, the hardenable flowable substance further comprising:

an anti-freeze.

25. The method of repairing an acoustic ceiling material according to claim 24, wherein the anti-freeze consists essentially of ethylene glycol.

26. The method of repairing an acoustic ceiling material according to claim 23, wherein the fungicide has a composition by percentage weight of 0.05-5%.

27. The method of repairing an acoustic ceiling material according to claim 24, wherein the anti-freeze has a composition by percentage weight of 1-10%.

28. A hardenable flowable substance for application to a patch surface surrounded by an acoustic ceiling material having an irregular surface texture to form a layer of textured patch material on the patch surface, wherein the hardenable flowable substance is storable in a fluid-tight dispensing container and sprayable utilizing a volatile organic compound (VOC) propellant, the hardenable flowable substance comprising:

a liquid base;

a filler selected to form an extender or bodifier for the resulting patch material;
an adhesive binder selected to adhere the resulting patch material to the surface;
an aggregate comprising polyethylene particulates that does not decompose in the presence of VOC propellants, selected to give the resulting patch material an irregular surface texture;

an anti-foaming agent; and

a suspension agent,

wherein the hardenable flowable substance is initially stored in fluid state and is dispensable in the form of an aerosol spray from the fluid-tight container and, after being released and curing, forms a bumpy, irregular surface texture that matches and is compatible with the acoustic ceiling material surrounding the patch.

29. The hardenable flowable substance according to claim 28, having the following composition by percentage weight:

the liquid base of 20-70%;

the filler of 40-80%;

the adhesive binder of 1-50%;

the propellant of 5-20%;

the aggregate of 2-40%;

the anti-foaming agent of 1-10%; and

the suspension agent of 1-20%.

30. The hardenable flowable substance according to claim 29, wherein:

the liquid base consists essentially of water;
the filler consists essentially of a mixture of calcium carbonate and mica;
the adhesive binder consists essentially of polyvinyl alcohol;
the propellant consists essentially of dimethyl ether;
the polyethylene particulates of the aggregate are open-cell;
the anti-foaming agent consists essentially of Wichenol; and
the suspension agent consists essentially of carbonal.

31. The hardenable flowable substance according to claim 29, wherein:
the liquid base consists essentially of a solvent;
the filler consists essentially of a mixture of calcium carbonate and mica;
the adhesive binder consists essentially of polyvinyl alcohol;
the propellant consists essentially of dimethyl ether;
the polyethylene particulates of the aggregate are open-cell;
the anti-foaming agent consists essentially of Wichenol; and
the suspension agent consists essentially of carbonal.
32. The hardenable flowable substance according to claim 28, further comprising:
a fungicide.
33. The hardenable flowable substance according to claim 28, further comprising:
an anti-freeze.

34. The hardenable flowable substance according to claim 33, wherein the anti-freeze consists essentially of ethylene glycol.

35. The hardenable flowable substance according to claim 32, wherein the fungicide as a composition by percentage weight of 0.05-5%.

36. The hardenable flowable substance according to claim 33, wherein the anti-freeze has a composition by percentage weight of 1-10%.

37. A system for dispensing a hardenable flowable substance sprayable utilizing a volatile organic compound (VOC) propellant for application to a patch surface surrounded by an acoustic ceiling material having an irregular surface texture to form a layer of textured patch material on the patch surface, the system comprising:

a fluid-tight container, in which the hardenable flowable substance is stored; and

an actuator on the fluid-tight container for selectively releasing the hardenable flowable substance in the form of an aerosol spray,

wherein said hardenable flowable substance comprises,

a liquid base,

a filler selected to form an extender or bodifier for the resulting patch material,

an adhesive binder selected to adhere the resulting patch material to the surface,

an aggregate comprising polyethylene particulates that does not decompose in the presence of VOC propellants, selected to give the resulting patch material an irregular surface texture,
an anti-foaming agent, and
a suspension agent,
wherein the hardenable flowable substance forms a bumpy, irregular surface texture that matches and is compatible with the acoustic ceiling material surrounding the patch.

38. The system for dispensing the hardenable flowable substance according to claim 37, wherein the hardenable flowable substance has the following composition by percentage weight:

the liquid base of 20-70%;
the filler of 40-80%;
the adhesive binder of 1-50%;
the propellant of 5-20%;
the aggregate of 2-40%;
the anti-foaming agent of 1-10%; and
the suspension agent of 1-20%.

39. The system for dispensing the hardenable flowable substance according to claim 38, wherein:

the liquid base consists essentially of water;

the filler consists essentially of a mixture of limestone and clay;
the adhesive binder consists essentially of polyvinyl alcohol;
the propellant consists essentially of dimethyl ether;
the polyethylene particulates of the aggregate are open-cell;
the anti-foaming agent consists essentially of Wichenol; and
the suspension agent consists essentially of carbonal.

40. The system for dispensing the hardenable flowable substance according to claim 38, wherein:

the liquid base consists essentially of a solvent;
the filler consists essentially of a mixture of limestone and clay;
the adhesive binder consists essentially of polyvinyl alcohol;
the propellant consists essentially of dimethyl ether;
the polyethylene particulates of the aggregate are open-cell;
the anti-foaming agent consists essentially of Wichenol; and
the suspension agent consists essentially of carbonal.

41. The system for dispensing the hardenable flowable substance according to claim 37, the hardenable flowable substance further comprising:

a fungicide.

42. The system for dispensing the hardenable flowable substance according to claim 37, the hardenable flowable substance further comprising:

an anti-freeze.

43. The system for dispensing the hardenable flowable substance according to claim 42, wherein the anti-freeze consists essentially of ethylene glycol.

44. The system for dispensing the hardenable flowable substance according to claim 41, wherein the fungicide has a composition by percentage weight of 0.05-5%.

45. The system for dispensing the hardenable flowable substance according to claim 42, wherein the anti-freeze has a composition by percentage weight of 1-10%.

46. A method of repairing an acoustic ceiling material, the method comprising:
storing a hardenable flowable substance utilizing a volatile organic compound (VOC) propellant for application to a patch surface surrounded by an acoustic ceiling material having an irregular surface texture in a fluid-tight dispensing container, the hardenable flowable substance comprising,

a liquid base,

a filler selected to form an extender or bodifier for the resulting patch material,

an adhesive binder selected to adhere the resulting patch material to the surface,

an aggregate comprising polyethylene particulates that does not decompose in the presence of VOC propellants, selected to give the resulting patch material an irregular surface texture,

an anti-foaming agent, and

a suspension agent,

wherein the fluid-tight container has an actuator for selectively dispensing the hardenable flowable substance in the form of an aerosol spray; and dispensing selectively the hardenable flowable substance onto the patch surface such that the hardenable flowable substance forms a layer having a bumpy, irregular surface texture after being dispensed and curing which matches and is compatible with the acoustic ceiling material surrounding the patch.

47. The method of repairing an acoustic ceiling material according to claim 46, wherein the hardenable flowable substance has the following composition by percentage weight:

the liquid base of 20-70%;

the filler of 40-80%;

the adhesive binder of 1-50%;

the propellant of 5-20%;

the aggregate of 2-40%;

the anti-foaming agent of 1-10%; and

the suspension agent of 1-20%.

48. The method of repairing an acoustic ceiling material according to claim 47,

wherein:

- the liquid base consists essentially of water;
- the filler consists essentially of a mixture of limestone and clay;
- the adhesive binder consists essentially of polyvinyl alcohol;
- the propellant consists essentially of dimethyl ether;
- the polyethylene particulates of the aggregate are open-cell;
- the anti-foaming agent consists essentially of Wichenol; and
- the suspension agent consists essentially of carbonal.

49. The method of repairing an acoustic ceiling material according to claim 47,

wherein:

- the liquid base consists essentially of a solvent;
- the filler consists essentially of a mixture of limestone and clay;
- the adhesive binder consists essentially of polyvinyl alcohol;
- the propellant consists essentially of dimethyl ether;
- the polyethylene particulates of the aggregate are open-cell;
- the anti-foaming agent consists essentially of Wichenol; and
- the suspension agent consists essentially of carbonal.

50. The method of repairing an acoustic ceiling material according to claim 46, the

hardenable flowable substance further comprising:

- a fungicide.

51. The method of repairing an acoustic ceiling material according to claim 46, the hardenable flowable substance further comprising:

an anti-freeze.

52. The method of repairing an acoustic ceiling material according to claim 51, wherein the anti-freeze consists essentially of ethylene glycol.

53. The method of repairing an acoustic ceiling material according to claim 50, wherein the fungicide has a composition by percentage weight of 0.05-5%.

54. The method of repairing an acoustic ceiling material according to claim 51, wherein the anti-freeze has a composition by percentage weight of 1-10%.